Advanced
GeoEnvironmental, Inc.

19 April 2006
AGE-NC Project No. 99-0645

Ms. Margaret Lagorio
San Joaquin County Environmental Health Department
304 East Weber Avenue, 3rd Floor
Stockton, CA 95202

Subject: **Work Plan for Well Destruction**
Former MEL BOKIDES PETROLEUM - Linden
8203 East Highway 26, Stockton, CA

Dear Ms. Lagorio:

At the request of Mr. Mel Bolides of Mel Bokides Petroleum, Inc., and as directed by San Joaquin County Environmental Health Department (EHD) in a letter dated 28 March 2006, *Advanced* GeoEnvironmental, Inc. (AGE) has prepared this work plan for the destruction of ground water and vapor wells at 8203 East Highway 26, in Stockton, California. The above-referenced letter is included as Appendix A; location of the site is illustrated in Figure 1; site structures and monitoring well locations are depicted on Figure 2. Also enclosed with this work plan is a well destruction permit and the associated well destruction permit fee.

INTRODUCTION/BACKGROUND

To date, a total of four groundwater monitoring wells (MW-1, MW-1R, MW-2, MW-3) and four vapor extraction wells (VW-1A, VW-1B, VW-2, VW-3) have been advanced onsite. On 27 September 2002, monitoring well MW-1 was destroyed by drilling out the entire boring length and backfilling with neat cement and bentonite in the upper 15 feet of the excavation. Additionally, the domestic on-site well was destroyed by percussion explosion and backfilled with a sand and cement mix.

Based on previous site assessments, and as detailed in the AGE-prepared *Closure Summary Report* dated 19 December 2005 (*CSR*), the majority of petroleum hydrocarbon-impacted soil appears to be limited to the west end and, to a lesser extent, the north end of the former UST area. The highest petroleum hydrocarbon concentrations in soil, namely TPH-g, were detected in samples T1-N-15 and WW, collected in May 1999 and March 2000, respectively.

Historically, low concentrations of dissolved petroleum hydrocarbon constituents were detected sporadically in monitoring well MW-1 before its destruction in September 2002. MTBE was detected in MW-1R during its initial ground water monitoring in October 2003 at a concentration of 120 µg/l; TPH-g was detected in well MW-2 during its second ground water monitoring in April 2002 at a concentration of 130 µg/l. Monitoring well MW-3 has remained uncontaminated. The concentrations of petroleum hydrocarbon contaminants in wells MW-1, MW-1R, and MW-2 have declined below detection limits between the initiation of ground water monitoring in November 2001 or October 2003 (MW-1R) and the present.

The concentration of petroleum hydrocarbons in soil vapor samples extracted from well VW1B, installed in the area of greatest adsorbed petroleum hydrocarbon contamination, has declined below laboratory detection limits between initiation of SVE remediation in October 2004 and the present.

In order to ensure that ground water monitoring wells do not provide a vertical conduit for contaminants, AGE proposes to properly destroy them in accordance with San Joaquin County Environmental Health Department (EHD) *Standards For Well Construction and Destruction.*

PROCEDURES

As required by EHD permitting, a health and safety plan will be prepared in accordance with *Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities* (National Institute for Occupational Safety and Health Administration, U.S. Coast Guard and U.S. Environmental Protection Agency, 1985). Prior to drilling activities, each proposed drilling location will be clearly marked and an utility clearance obtained through Underground Service Alert.

Based on the EHD *"Standards"* the wells will be sounded for total depth and checked for integrity, any obstruction found in the well will be removed. Well boxes and caps will be removed to expose the casing. As required by the *Standards*, wells showing no history of contaminant impact will be destroyed by pressure grouting; impacted wells (even if currently non-detect) will be destroyed by complete over-drilling.

Due to historical analytical results from well installation, groundwater monitoring, and vapor sampling activities (see the Tables in *CSR)*, none of the seven existing on-site wells qualify as 'non-detect'. MW-1R, MW-2, VW-1A, VW-1B, and VW-2 are all clearly impacted according to the *Standards.* Although contamination was not encountered in soil samples from 70 feet - 100 feet below surface grade (bsg) in pilot boring B-3, completed as MW-3, and quarterly groundwater samples have been non-detect throughout monitoring activities (the one detection in the fourth quarter 2004 event was proven erroneous), nearby VW-3 suggests that these wells are located in an area of suspected soil contamination. Low levels of MTBE were detected during the advancement

of VW-3 in September 2003 between 30 feet and 40 feet bsg; adsorbed contamination may be present at these depths in the area of MW-3 as well. As a precaution, therefore, AGE proposes that all wells be destroyed by over-drilling to total depth. Procedures are outlined below.

For impacted wells, and those in an area of known or suspected contamination, Section 13.17.6. of the *Standards* will be followed for destruction procedures. Wells will be drilled-out to their total depth utilizing 8-inch diameter hollow-stem augers. All original well construction materials will be removed (including well casing, screen, filter pack, and annular seal) to ensure that no residual contamination is sealed within the abandoned borehole. The remaining borehole will then be backfilled to surface grade with neat cement and covered with concrete or asphalt.

Soil cuttings generated during over-drilling activities and rinseate will be containerized in properly labeled Department of Transportation (D.O.T.)-approved 55-gallon drums, and stored on-site for disposal, in an area lacking public access.

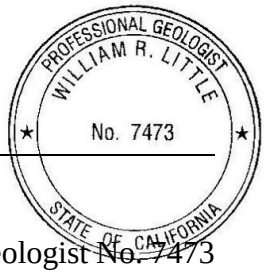
If you have any questions or require further information, please contact our office at (209) 467-1006.

Sincerely,

***Advanced* GeoEnvironmental, Inc.**

Anna W. Behrens
Staff Environmental Scientist

William R. Little
Senior Project Geologist
California Professional Geologist No. 7473

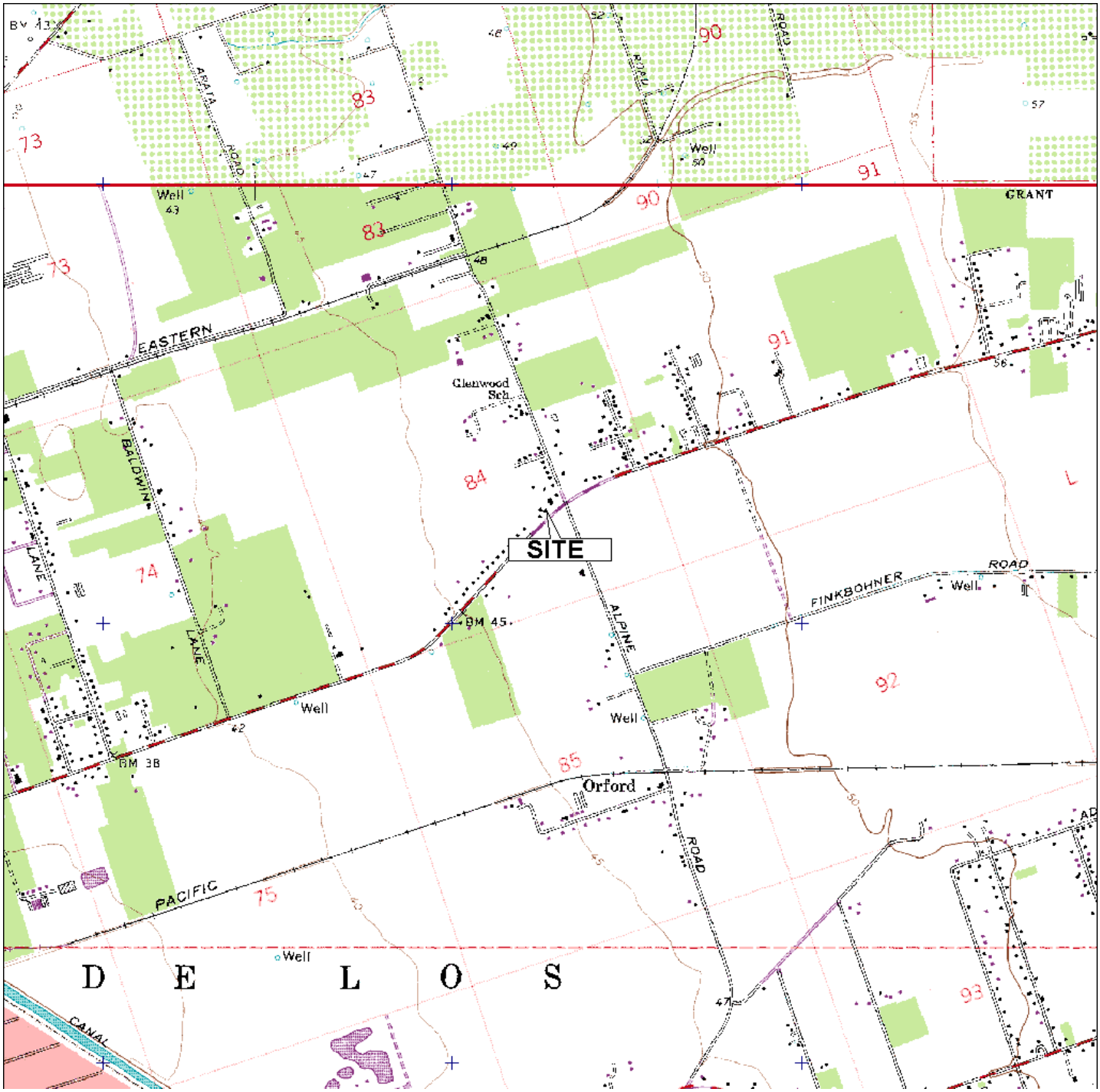


Enclosures:

Figure 1 - *Location Map*
Figure 2 - *Site Plan*
Appendix A - *EHD Letter 28 March 2006*
Well Destruction Permit Application and Fee

cc: Mr. Nicholas Bokides of Mel Bokides Petroleum, Inc.

FIGURES



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FEET

STOCKTON EAST QUADRANGLE, CALIFORNIA
7.5 MINUTE SERIES (U.S. GEOLOGICAL SURVEY)
PHOTOREVISED 1987

LOCATION MAP

MEL BOKIDES PETROLEUM – LINDEN
8203 EAST HIGHWAY 26
STOCKTON, CALIFORNIA

Advanced GeoEnvironmental, Inc.
of Northern California

PROJECT NO. AGE-NC-99-0645	FILE: LOCATION	FIGURE: 1
DATE: 17 MAY 2002	DRAWN BY: MAC	

LEGEND

- BUILDING
- FORMER DOMESTIC/MONITORING WATER WELL
- MONITORING WELL
- SOIL BORING LOCATION
- SOIL SAMPLE LOCATION
- SHALLOW SOIL VAPOR EXTRACTION WELL (15–40 FEET)
- DEEP SOIL VAPOR EXTRACTION WELL (45–70 FEET)
- EXTENT OF ANGLED SOIL BORING

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SITE PLAN

Former MEL BOKIDES PETROLEUM – Linden
8203 EAST HIGHWAY 26
STOCKTON, CALIFORNIA

Advanced GeoEnvironmental, Inc.
of Northern California

PROJECT NO. AGE-NC-99-0645	FILE: MBPLFig2	FIGURE:
DATE: 19 DECEMBER 2005	DRAWN BY: MAC	2

APPENDIX A

ENVIRONMENTAL HEALTH DEPARTMENT
SAN JOAQUIN COUNTY

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Director
Laurie A. Cotulla, R.E.H.S.
Program Manager

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MAR 2 8 2006

NICHOLAS BOKIDES
MEL BOKIDES PETROLEUM INC
P O BOX 7747
STOCKTON CA 95267

AMARJIT SINGH
3006 COUNTRY CLUB BLVD
STOCKTON CA 95204

RE: 8203 Hwy 26
Stockton, CA

SITE CODE: 000691

In a letter dated March 20, 2006, the Central Valley Regional Water Quality Control Board (CVRWQCB) concurred with the San Joaquin County Environmental Health Department (EHD) determination of No Further Action Required (NFAR) concerning investigation and remediation of the contamination from the former underground storage tanks at the above referenced site. Before a NFAR letter can be provided to you, the monitoring wells at the site must be properly destroyed.

Submit a work plan to destroy the wells, an EHD well destruction permit application, and $339 permit and inspection fee by May 1, 2006.

If you have any questions contact me at (209) 468-3449.

Donna Heran, REHS, Director
Environmental Health Department

Margaret Lagorio

Margaret Lagorio, Supervising REHS
LOP/Site Mitigation Unit IV

cc: CVRWQCB – Jim Barton
AGE – Bill Little